

Inter-specific Competition

By D. G. SEVASTOPULO, F.R.E.S.*

I cannot help feeling that Dr. Shapiro (1975, *Ent. Rec.*, 87: 17) does me rather less than justice when he accuses me of parochialism and suggests that I am looking at inter-specific competition as though butterflies are unique in their competitive relationships. As one who has always considered himself as one of the few surviving general naturalists in an age of increasing specialisation (at a party organised by the International Centre of Insect Physiology and Ecology recently, I met physiologists, ecologists and geneticists, one was even a mosquito geneticist, but all disclaimed being entomologists), I have watched the ousting of the African Pied Crow (*Corvus albus* Muller) from its post of Honorary Scavenger in Mombasa by the Indian House Crow (*Corvus splendens* Vieillot). When I first arrived in Mombasa in 1948 every dustbin had its attendant one or more pairs of Pied Crow. I do not remember seeing Indian House Crows at all, and, being fresh from India, I am unlikely to have missed such a very familiar bird. Today the Pied Crow has left Mombasa Island completely and is becoming increasingly rare in the residential areas of the adjoining mainland. Again, over the last 15 years there have been major changes in the bird population of the dry bush country between Mombasa and Voi. Definite reasons can be given for both these changes, the Indian House Crow is far more prolific and has a far greater degree of low cunning than its African cousin. The changes in the dry bush country are almost certainly due to the felling of the few trees for the iniquitous export trade in charcoal, which has eliminated certain nesting sites.

Both birds and mammals have offensive weapons in their beaks, teeth and claws with which they can attack intruders into their territory, even certain insects, the Hymenoptera, for example, are known to bite the wings off intruders. The Lepidoptera, however, have no such weapons. The serrated costa of certain *Charaxes* species can do very little real damage to an adversary, and I cannot bring myself to accept the idea that mere antipathy, for want of a better term, can cause the displacement of one species by another. There must, I feel, be some definite, physical cause.

Over the past two years there has been a reversal of the relative abundance of the two most common species of Acherontine Sphingids in my garden, viz. *Acherontia atropos* L. and *Coelonia mauritii* Btlr. Both species have a number of larval food-plants in common, *mauritii* probably has more food-plants specific to itself than *atropos*, and on this score it should have the advantage, and up to two years ago it was definitely the commoner species. It is now much the rarer and I feel that the reversal in abundance is due to the exceptionally dry conditions we have had, which have had a greater adverse effect on *mauritii* than on *atropos*; possibly the more robust larva of *atropos* has less difficulty in burrowing into the sun-baked soil than that of

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the more slender *mauritii*, and the same applies to the emergence of the imago.

Dr. Shapiro will see from my reply to Dr. Luckens' "Cruciferae enough for all" (1974, *Ent. Rec.*, **86**:71-72), of which the publication has been delayed by the *Record's* printing troubles, that I do not agree with his concept, and I still maintain that a careful examination of all factors would almost certainly provide a clue to the change in the Argynnid population of Dr. Luckens' wood, which started the argument, and also the increase in the introduced *Papilio andaemon* Hübn. at the expense of other *Papilio* species in Jamaica.

It will be interesting to see what effect the recent colonisation of Australia by *Danaus plexippus* L. has on the indigenous *Danaus* species.

Notes and Observations

CALAMOTROPHA PALUDELLA HUBNER (LEP.: PYRALIDAE) IN SURREY. — On 17th-18th July I had in my light trap an example of this species: I nearly missed it because, with its forewings folded tightly over its pure white hindwings, it was exactly the same colour as the egg tray on which it rested. I know of no published record of this very local marsh species in Surrey, but Mr. J. L. Messenger kindly allows me to record now his capture of one near the Thames at Weybridge on 6th July 1952. Any further news of the species in Surrey would be welcome; it could be easily overlooked as the Wainscot *Chilodes maritimus* Tauscher. The larva is known to feed and to pupate in stems of the bulrush, of which there are scattered patches in ponds and in a disused canal near my house; but I have still to locate it. — R. F. BRETHERTON, Folly Hill, Birtley Green, Bramley, Guildford, Surrey GU5 0LE, 9.8.75.

ANOTHER HEMARIS FUCIFORMIS LINN. IN HANTS. — I reported the occurrence of *H. fuciformis* at Linwood, Hants. in 1972 and 1973 (*Ent. Rec.*, **85**: 203). *The Butterflies and Moths of Hampshire and the Isle of Wight* (Goater, 1974) records that this species was "formerly common to very common in the New Forest rides, etc." but that a decline began in the 1940s and the only other record received was from Appleslade (which is only a mile from Linwood) in 1953. I am happy to report that on 12th July 1975, Mr. Adrian Butterworth showed me a half-grown larva which was found on honeysuckle in his garden at Brockenhurst. Is it too much to hope that this rarity is still around elsewhere in the Forest? — L. W. SIGGS, Sungate, Football Green, Minstead, Lyndhurst, Hants.

A SECOND BROOD OF CUPIDO MINIMUS FUESSLY IN 1975. — A second brood of the Small Blue has been in flight here in East Sussex during the latter days of July. First noted on 26th July, the butterflies are in good numbers and quite full sized. — COLIN PRATT, Oleander, 5 View Road, Peacehaven, Newhaven, Sussex, 3.viii.1975.